UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 11 2011

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

MEMORANDUM

SUBJECT: Meeting with Sierra Club

FROM: Lynn M. Beasley, Work Group Leader
Regulation and Policy Development Division

TO: The Record

On Thursday, March 24, 2011, members of the CERCLA/EPCRA Reporting Requirements for Air Releases of Hazardous Substances from Animal Waste at Farms workgroup and me, met with representatives from the Environmental community (i.e., Sierra Club, Waterkeeper, EarthJustice, the Environmental Integrity Project, and the Humane Society of the U.S.). The meeting was held at the request of the Sierra Club for the purpose of hearing from EPA about the status of the reconsideration of the 2008 Final Rule, "CERCLA/EPCRA Administrative Reporting Exemption for Air Releases of Hazardous Substances from Animal Waste at Farms."

In addition to the discussion of the Final Rule reconsideration, the Environmental community representatives wanted to share their concerns about continuous release reporting and seasonal variances in emissions from farms. Specifically, the Environmental community representatives would like to see more frequent reporting, or updating, of continuous release reports than is currently required under the Emergency Planning and Community Right to Know Act (EPCRA) and the 2008 Final Rule. They would also like EPA to clarify that a change in operations will change reporting (including statistically significant increases (SSIs) and episodic releases) and that continuous release reports should be updated accordingly. They were concerned that currently farms report broad ranges of releases in order to capture seasonal spikes and other variances in their releases throughout the year, rather than keeping narrow ranges of releases and then reporting spikes episodically or as a separate continuous release event. Continuous release reporting forms should be tailored to capture seasonal spikes in emissions. Attached are four graphic depictions of the spikes in ammonia emissions from poultry houses over approximately a two year period that the Environmental community representatives used to illustrate their point.[1]

[1] The source of the graphs/report was not provided.

In addition to their concerns about continuous release reporting, the Environmental community representatives expressed their preference that EPA reinstate reporting under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and full reporting under EPCRA (i.e., eliminate exemption thresholds). In order to facilitate community access to such reporting they would like EPA to develop a system where the public has easy access to the reports.

Also attached is the sign-in sheet of attendees – some were on the phone.

Attachments (a/s)

MANDARIN ORIENTAL
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Deborah Goldberg	Earthjustice	dgoldberg@earthjustice.org
Jessica Culpepper	HSUS	jculpepper@humanesociety.org
Michelle Merkel	waterkeeper	
Timothy Sullivan	EPA	sullivan.tim@epa.gov
Sarda Houland	EPA	Houland.Sarda@epa.gov
Kim Snell-Zarcone		

Café MōZU

CITYZEN

empress
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THE SPA
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MANDARIN ORIENTAL

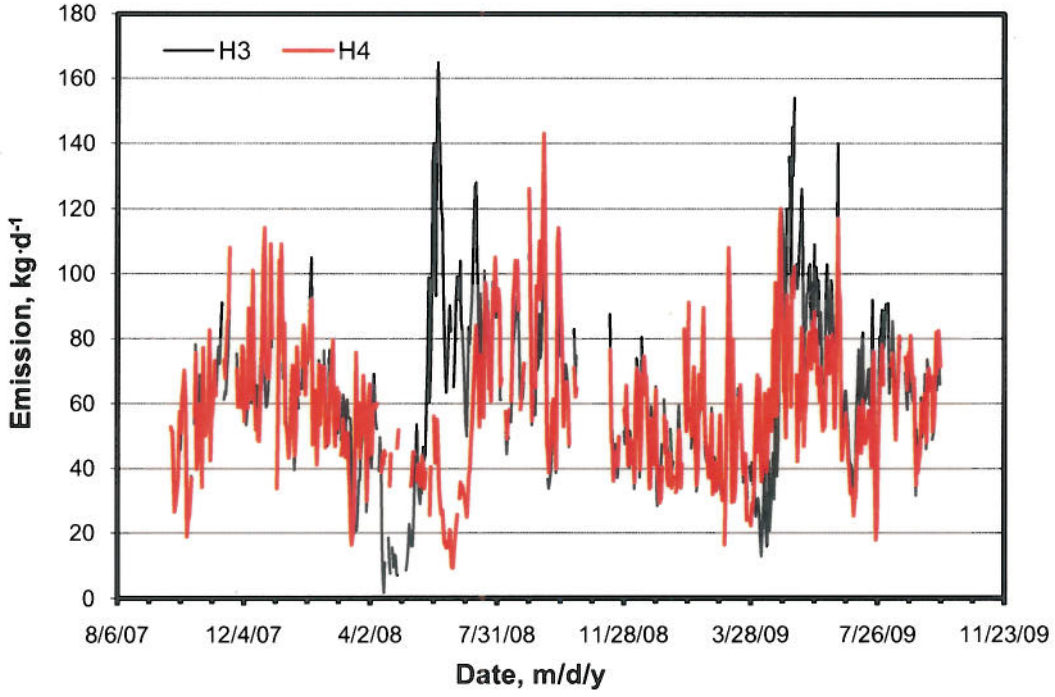

Figure 10. The daily mean NH3 emissions from Houses 3 and 4.

Table 20. Data completeness (% successful data collection) of emissions data.

Location	Days with >75% valid emission data				
	NH_3	H_2S	PM_{10}	$PM_{2.5}$	TSP
H3	613	641	377	21	44
H4	614	635	518	33	62

4.9. Reconciliation with Data Quality Objectives

The data quality objectives prior to the study were to measure gas and PM emissions from mechanically-ventilated buildings with total relative uncertainties of 27% and 32%, respectively.

4.9.1. Airflow

The overall average airflows for H3and H4 were 101.1± 32.5 $dsm^3 s^{-1}$ (n=613), and 97.3 ± 30.3 $dsm^3 s^{-1}$ (n=614), respectively. The average airflows were approximately equivalent to 11.4, 122-cm fans operating in each house. The airflow measurement uncertainty at these conditions was 2.6%, based on the fan models.

4.9.2. Gas Emissions

The bias and precision of NH_3 concentration measurements were derived from the NH_3 zero/span checks as compared with the NH_3 correction models (Table 8). The time-weighted relative bias and precision of NH_3 measurements were 0.0% and 0.4% and 0.2% and 2.1% for zero and span, respectively.

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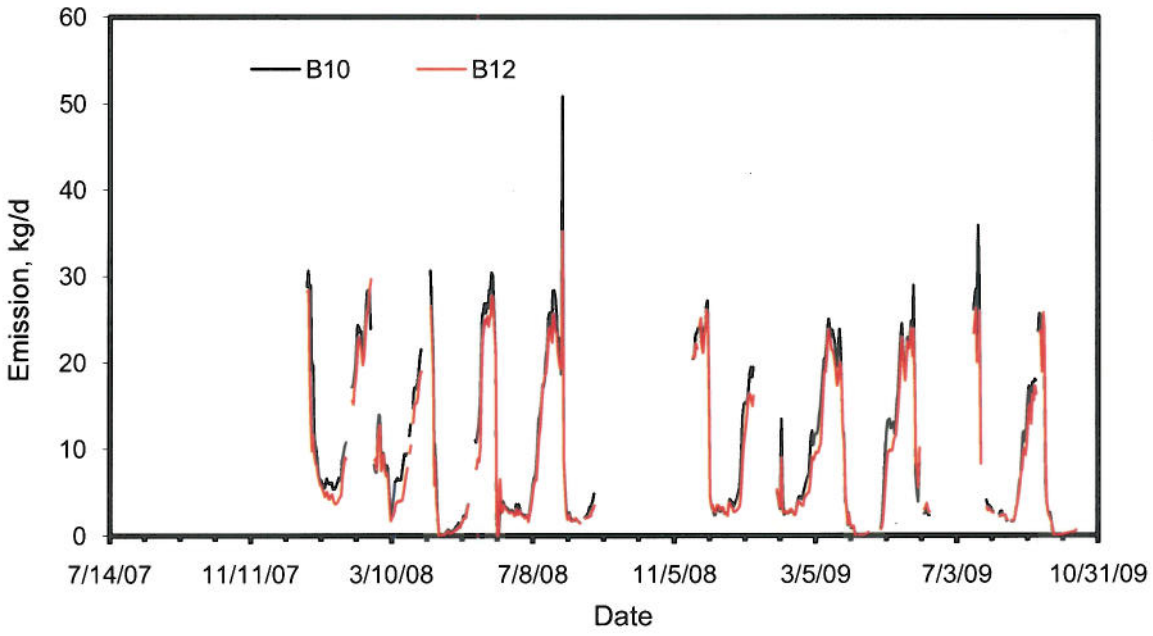

Figure 9. Daily mean NH_3 emissions.

4.8. Emission Data Completeness

Daily completeness data is given in Table E10. The number of complete data days (>75% valid required for reporting a daily mean) were calculated for emission measurements conducted from 9/27/07 to 10/21/09 (Table 22). The number of daily means of NH_3 emissions was reduced by delays in receiving the INNOVA 1412 at the beginning of the study, and by calibration and maintenance issues with the INNOVA 1412. The quantity of PM emissions data was reduced by TEOM failures.

Table 22. Emissions data completeness (days with >75% valid emission data collection).

Location	NH_3	H_2S	PM_{10}	$PM_{2.5}$	TSP
H10	467	592	352	53	37
H12	466	590	376	43	39

4.9. Reconciliation with Data Quality Objectives

The data quality objectives prior to the study were to measure gas and PM emissions from mechanically-ventilated buildings with total relative uncertainties of 27% and 32%, respectively.

4.9.1. Airflow

The overall average airflows for H10 and H12 were 14.7 ± 14.1 $dsm^3 s^{-1}$ (n=658), and 15.0 ± 14.6 $dsm^3 s^{-1}$ (n=648), respectively. The average airflows were approximately equivalent to one 91-cm fan and 1.6, 122-cm fans operating in each house. The airflow measurement uncertainty at these conditions was 13.4%, based on the fan models.

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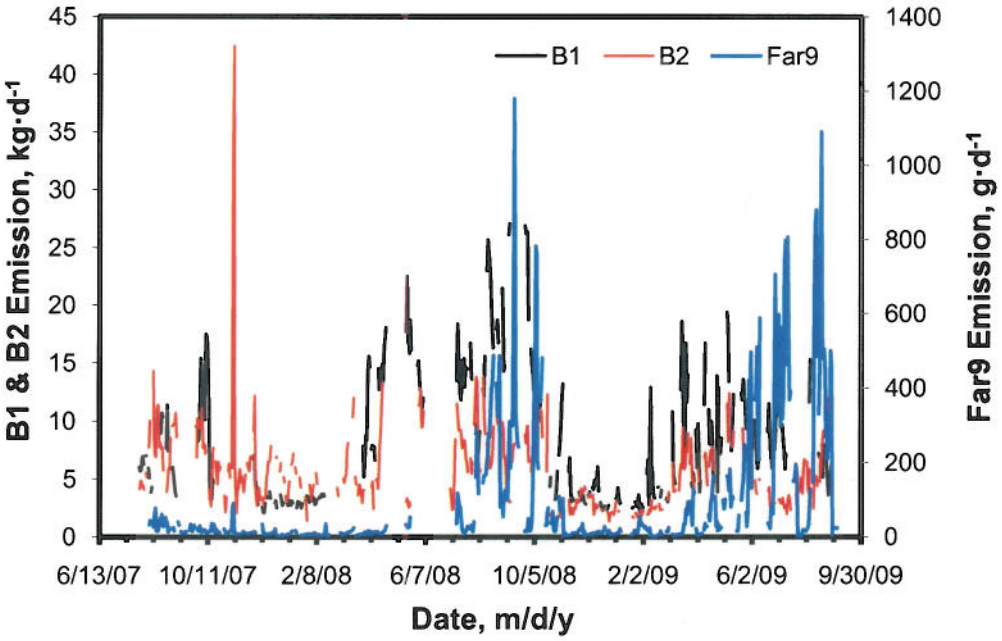

Figure 10. Daily mean H2S emission rates.

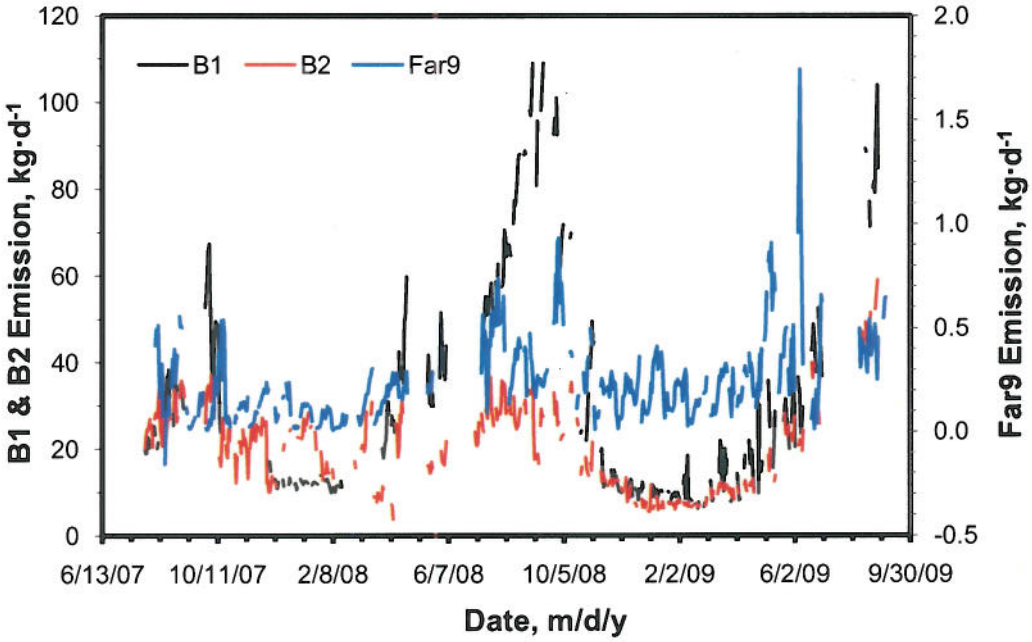

Figure 11. Daily mean NH_3 emission rates.

4.8. Emission Data Completeness

Daily completeness data is given in **Error! Reference source not found.**, and summarized in Table 21. The number of complete data days (>75% valid required for reporting a daily mean) were calculated for emission measurements conducted from 7/19/07 to 9/4/09. The NH_3 and H_2S

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Table 39. Characteristics of NH_3 emissions.

Variable	H8	H9	Shed
Avg±SD, $kg \cdot d^{-1}$	70.6±36.8	66.5±42.2	4.6±6
Min, $kg \cdot d^{-1}$	6.69	0.413	0.138
Max, $kg \cdot d^{-1}$	263	357	86.3
Valid data day, n	624	629	518
Avg±SD, $g \cdot d^{-1} hd^{-1}$	0.282±0.145	0.277±0.165	0.01±0.012
Min, $g \cdot d^{-1} hd^{-1}$	0.026	0.020	0.000
Max, $g \cdot d^{-1} hd^{-1}$	1.040	1.430	0.171

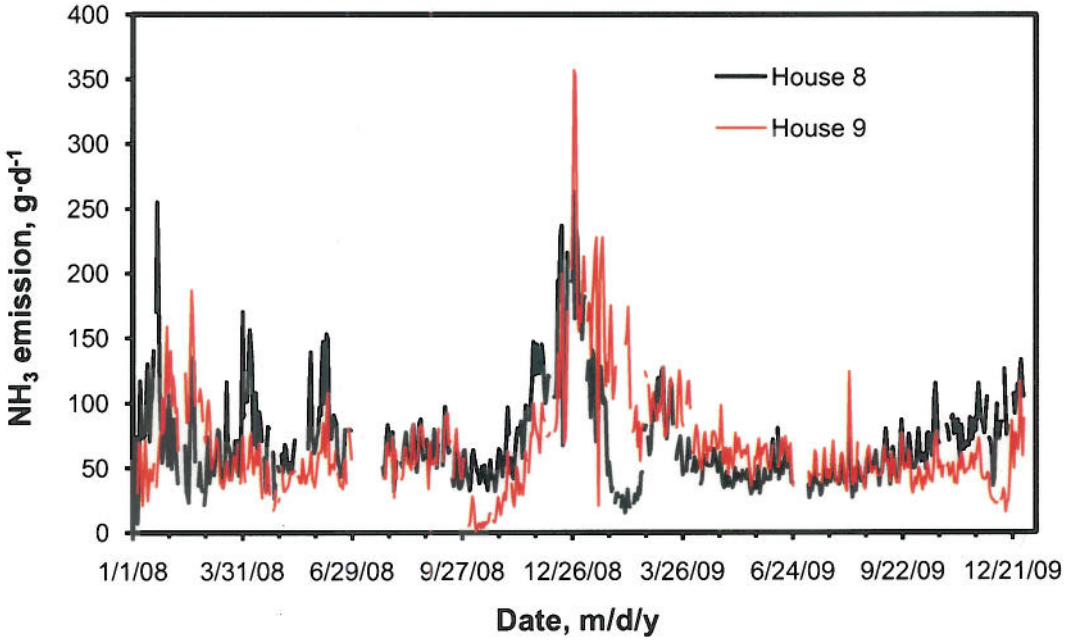

Figure 10. Daily mean NH_3 emissions from houses 8 and 9.

4.8. Emission Data Completeness

Daily completeness data is given in Table F11. The number of complete data days (>75% valid required for reporting a daily mean) were calculated for emission measurements conducted from 1/1/08 to 12/31/09, a total of 730 d (Table 40). The number of daily means of NH_3 and H_2S emissions was reduced by the failures and extended repair period of the gas analyzers. The quantity of PM emissions data was reduced by more frequent TEOM failures and repairs.

Table 40. House emissions data completeness during the 730 d of monitoring.

Location	Days with >75% valid house emission data				
	NH_3	H_2S	PM_{10}	$PM_{2.5}$	TSP
H8	624	634	346	25	35
H9	629	645	361	31	34
Manure shed	518	534	307	30	24

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